

ABSTRACT OF THE DISCLOSURE

There is provided a substrate processing method which is capable of lowering the initial cost and the running cost of an apparatus, does not require a wide installation space, does not degrade electrical characteristics such as an interconnect resistance and a leakage current, and is capable of efficiently forming a high-quality alloy film on the surface of a metal region. The substrate processing method including: preparing a substrate having a metal region on a surface thereof, performing a pre-plating treatment by bringing a pretreatment liquid into contact with the surface of the substrate to modify the entire surface thereof, removing the pretreatment liquid remaining on the surface of the substrate in a rinsing treatment, performing an electroless plating process on the surface of the substrate to selectively form an alloy film on the surface of the metal region, and post-cleaning the substrate after the electroless plating process and drying the substrate.